

# Crystal Max **N12**

Mono-Crystalline  
**640~670W**

**0~+5W POWER TOLERANCE**

- High efficiency H - type double glass HJT solar module
- HJT 210mm solar cell
- 0.24%/°C temperature coefficient, SMBB technology
- Up to 90% bifaciality, PIB sealant, Higher reliability
- Harsh environmental adaptation
- Bifacial module, Suitable for utility-scale power stations

15 years material warranty **15**

30 years power linear warranty **30**

**120**

HALF-CUT  
CELLS

**210**  
x210  
mm

RECTANGULAR  
CELLS

**A sound quality management  
system and product certification**

IEC61215(2016), IEC61730(2016)

ISO9001:2015: Quality management system

ISO14001:2015: Environmental management system

ISO45001:2018: Occupational health and safety management system

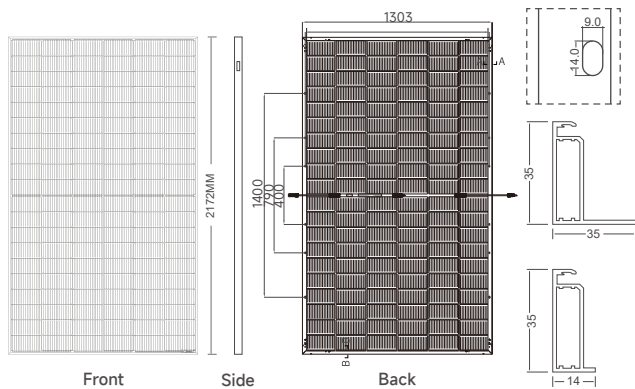
**23.7%**  
MAXIMUM CONVERSION

**0~+5W**  
POWER TOLERANCE

**0.36%**  
0.4% PER YEAR OVER 30 YEARS

**Half-Cut Module**  
LOWER TEMPERATURE COEFFICIENT

## Mechanical Diagrams



Length: ±2mm Width: ±2mm Thickness: ±1mm Hole pitch: ±2mm

## Packing Standard

Container capacity(40HQ)

Pallet size (mm) : 31pcs/pallet, 18pallets/ctns, 558pcs/ctn

## Electrical Parameters At BNPI

Maximum Power (Pmax)	705	710	715	720	725	730	735
Open Circuit Voltage (Voc)	46.09	46.16	46.23	46.30	46.36	46.43	46.50
Short Circuit Current (Isc)	19.11	19.21	19.34	19.47	19.60	19.73	19.86
Maximum Power Voltage (Vmp)	38.60	38.74	38.88	39.01	39.15	39.28	39.41
Maximum Power Current (Imp)	18.26	18.33	18.39	18.46	18.52	18.58	18.65

## Electrical Parameters

Module Type	QN-640HJT-01	QN-645HJT-01	QN-650HJT-01	QN-655HJT-01	QN-660HJT-01	QN-665HJT-01	QN-670HJT-01
	STC	STC	STC	STC	STC	STC	STC
Maximum Power (Pmax)	640	645	650	655	660	665	670
Open Circuit Voltage (Voc)	46.09	46.16	46.23	46.30	46.36	46.43	46.50
Short Circuit Current (Isc)	17.33	17.42	17.53	17.64	17.75	17.86	17.97
Maximum Power Voltage (Vmp)	38.60	38.74	38.88	39.01	39.15	39.28	39.41
Maximum Power Current (Imp)	16.58	16.65	16.72	16.79	16.85	16.93	17.00
Module Efficiency -ηm (%)	22.6	23.0	22.8	23.1	23.3	23.5	23.7

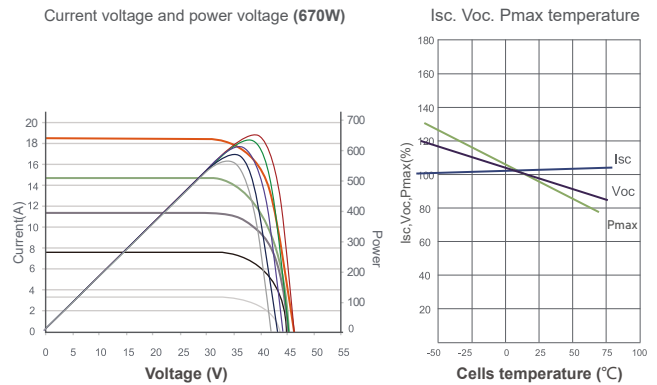
## Load Capacity

Max Load Front	5400Pa
Max Load Back	2400Pa
Through Hail Testing	25mm Diameter, Impact Speed 23m/s

## Temperature Coefficient (STC Test)

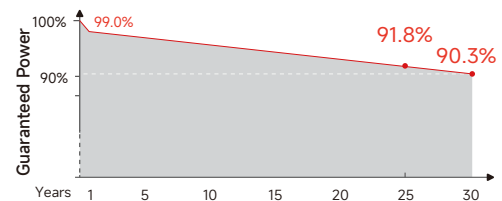
Temperature Coefficient of Isc	+0.04%/°C
Temperature Coefficient of Voc	-0.24%/°C
Temperature Coefficient of Pmax	-0.24%/°C

## Curve Figure



## Specification

Cell Type	Mono Crystalline
No. of Cells	120 [2x(6x10)] pcs
Dimension	2172x1303x35mm
Weight	35.5kg
Front Glass	2.0mm
Back Glass	2.0mm
Junction Box	IP68
Cable Length	300mm, 1200mm (can be customized)



## Operation Parameters

Operational Temperature	-40°C~+85°C
Maximum System Voltage	1500VDC (IEC)
Maximum Series Fuse Rating	35A
Power Tolerance	0~+5W
Nominal Operating Cell Temperature (NOCT)	43±2°C
Safety Class	class II
Refer. Bifacial Factor	75±10%

**STC** : Irradiance:1000W/m<sup>2</sup> | Battery temperature: 25°C | Atmospheric=1.5

**NOCT** : Irradiance:800W/m<sup>2</sup> | Ambient temperature: 20°C | Atmospheric=1.5 | Wind speed 1m/s

**BNPI** : Rear Irradiance 135W/m<sup>2</sup> | Bifaciality coefficient 80%±5%

D5 Greenland Window Building  
Nonghua Road  
Yuhuatai District, Nanjing, China  
www.q-sunsolar.com

